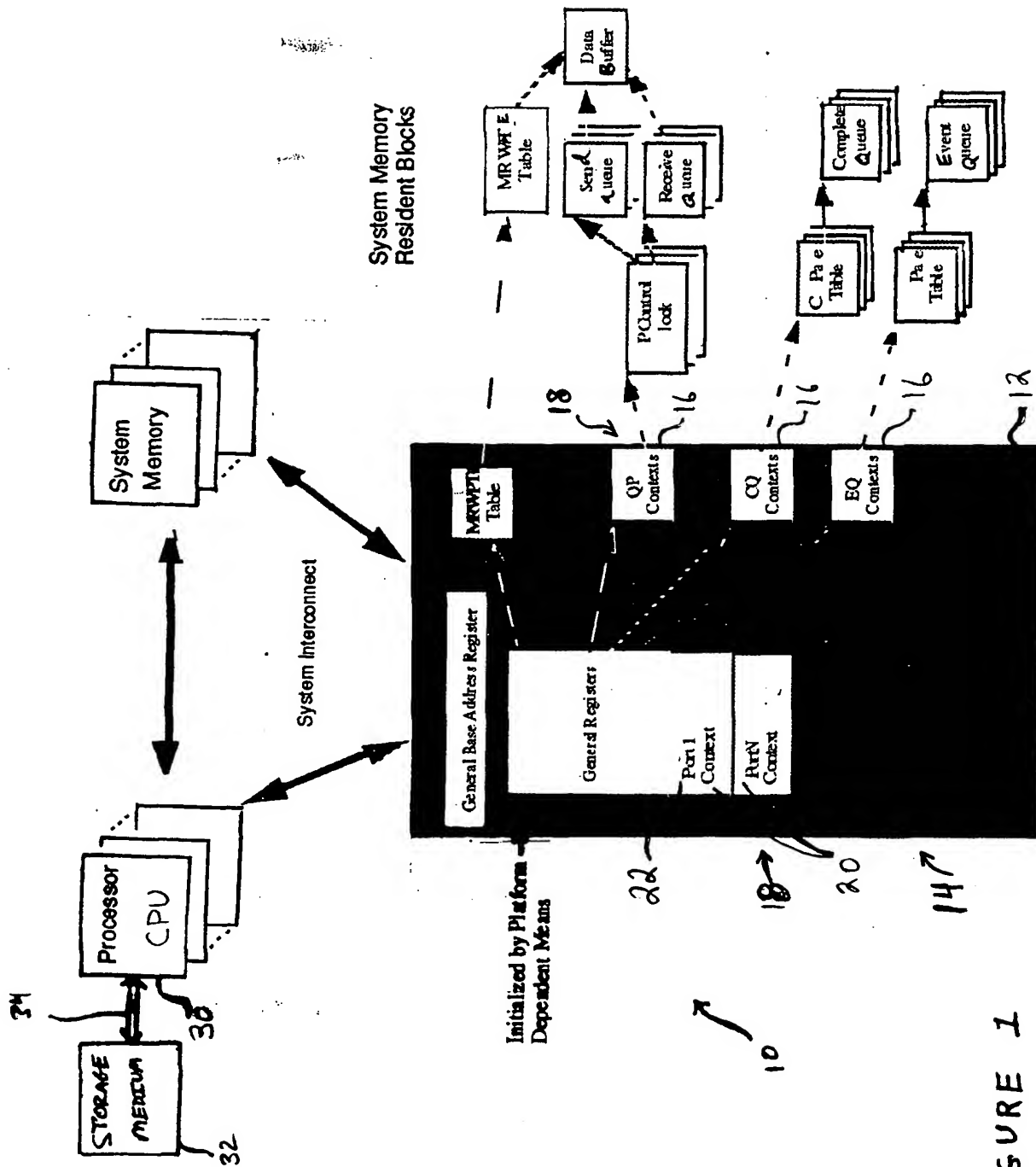FIGURE 1

The following figures illustrate conceptual details of parts of the overall resource-address-translation flow.

AT	AID=0000	AID=0001	AID=0002		AID=FFFF
00	ART_Example				
01					
02					
				. . . .	
FE					
FF					

Adapter-Type / Adapter-ID to Adapter-Resource Table Address

FIG. 2A

RT	ART_Example
00	ART Entry$_0$
01	ART Entry$_1$
02	ART_Example Entry for CQ Resource Type
03	
	. . .
FF	ART Entry$_{255}$

Adapter Resource Table (ART)

FIG. 2B

ART_Example Entry for CQ Resource Type

DWord							
0	ASAB		PRC		MRC		
1	SAC	Reserved	SMC		Reserved		
2	Reserved	LARID		Reserved		RIL	
3	Access-Table Address (ATA) - AT is for all CQ Resources					Reserved	
4	Adapter-Storage Base Address for SAT=0					Reserved	
5	Adapter-Storage Base Address for SAT=1					Reserved	
6-18						Reserved	
19	Adapter-Storage Base Address for SAT=15					Reserved	

Bits: 0 8 16 32 40 62 63

Figure 2C Adapter-Resource-Table Entry (ARTE) .

Figure 3 Resource Address Translation.

CQ Access Table (AT=0, AID=0)

	PSC	SIEC	M	P	V	PT	RZONE	GOID	PID
CQ0	0	0000	0	1	1	0	00	000	0000
CQ1	0	0000	0	1	1	0	00	000	0000
CQ2	1	3000	0	0	1	1	03	012	FF00

CQ Adapter-Resource-Table Entry
AT=0, AID=0

	SAC	PRC	ATA	SPSAA	RSAA	PSAA	USAA
CQ	5	2	AF000	1A000	2A000	3A000	4A000

RID=2 ⊗ 4K

02000

STORE MEMORY MAPPED I/O
Resource-Address Designation:
AID = 0 (HCA 0)
RT = 2 (CQ), RID = 2 (CQ2)
SAT = 2 (Privileged-Storage Area)
SAO = 008 hex

3C000

SAO=008 hex

HSA

HCA Address Space

CQ Privileged-Storage-Area Address

CQ0-3A000

CQ1-3B000

CQ2-3C000

3C008